# This is an official **CDC HEALTH UPDATE**

Distributed via Health Alert Network Wednesday, December 31, 2003, 19:35 EST (07:35 PM EST) CDCHAN-00180-03-12-31-UPD-N

## Update on Public Health Precautions related to Orange Threat Level: Part 4

(Information on Public Health Response to a Radiological or Nuclear Emergency)

#### Summary

In preparation for any possible public health emergency related to the current orange (high) threat level, the Centers for Disease Control and Prevention is disseminating a series of notices on potential hazards. This is the fourth in a series of four updates. This message focuses on public health roles and responsibilities in the event of a radiation or nuclear emergency.

During an orange (high) alert public health agencies should be prepared to respond to a terrorist event involving radiation or nuclear weapons. In the event of a terrorist attack involving radiation or nuclear weapons, the Department of Homeland Security would be the lead federal agency responding. However, local and state public health agencies would be among the first called upon to protect public health.

### Information on Public Health Response to a Radiological or Nuclear Emergency

During an orange (high) alert public health agencies and clinicians should be prepared to respond to a terrorist event involving radiation or nuclear weapons. Local and state health and radiation control officials would be the first called upon to respond to protect the public's health. The Centers for Disease Control and Prevention (CDC) will be ready to support the states in such an event.

There are several possible scenarios for a radiological terrorist emergency. Radioactive material could be introduced into the food or water supply. A " silent source" of radiation could be placed where people could be exposed (under a subway seat, in a food mall, etc). Conventional weapons could be used to widely disperse radio active materials (" dirty bomb"). A nuclear facility, nuclear waste facility or nuclear reactor could be destroyed by an airplane crash or an explosion. A small nuclear device could be detonated resulting in physical devastation similar to the World Trade Center on September 11, 2001. For information about the types and scope of injuries related to these types of scenarios, please see: http://www.bt.cdc.gov/radiation/emergencyfaq.asp.

An emergency involving radiation would include special challenges for public health responders and clinicians. Treatment of casualties is more difficult because of the contamination and the complications associated with other trauma. People who were not wounded in an immediate attack could still be harmed by exposure to radiation. The debris from the event and other normally harmless materials will be contaminated with radiation. The affected area may be much larger than the immediate scene of the crime. The radiological threat, invisible and uncertain in

terms of long-term health impacts, will cause considerable public fear and concern. Finally, the incident will be difficult to manage until appropriate monitoring equipment and well-trained technical individuals are available.

#### **Public Health Roles and Responsibilities**

In a radiological or nuclear emergency, a broad public health response involving state, local, and Federal public health agencies will be required. If required, the Department of Energy will establish a Federal Radiological Monitoring and Assessment Center to coordinate the development of radiation monitoring data for use by decision makers. CDC may also join the Food and Drug Administration, the U.S. Department of Agriculture, and the U.S. Environmental Protection Agency to form an Advisory Team for Environment, Food, and Health to assist state and local decision makers. Public health activities that may be required, depending upon the magnitude the event, include the following:

- Support the deployment of the Strategic National Stockpile through the Department of Homeland Security
- Conduct field investigations and monitoring of people
- Conduct surveillance and epidemiological studies
- Establish an exposure registry and monitor long-term impacts
- Provide advice on medical treatment and decontamination methods for people potentially exposed to radioactive materials s
- Develop criteria for entry and operations in the "hot zone," the area contaminated with radioactive materials
- Implement guidance for medical interventions and recommendations
- Implement disease control and prevention measures
- Assist in establishing and implementing protective action guidelines for both responders and members of the public
- Assist decision makers in making appropriate evacuation and relocation decisions
- Evaluate the health and medical impact on the public and emergency personnel of the event
- Provide communication with the public, policy makers, and the media. For CDC information for the public on radiation and nuclear emergencies, see http://www.bt.cdc.gov/radiation/index.asp#public.

Because these activities will require a collaborative public health effort, state and local health officials may wish to visit CDC's website at http://www.bt.cdc.gov/radiation/index.asp to obtain more information about radiological events and emergency preparedness.

The Federal Response Plan and the Federal Radiological Emergency Response Plan provide information about how federal agencies will coordinate their support for state and local officials.

The Federal Response Plan can be found at http://www.fema.gov/rrr/frp/

The Federal Radiological Emergency Response Plan can be found at http://www.nrt.org

State and local public health authorities should contact their state radiation control program director for assistance in responding to a radiological or nuclear emergency in their jurisdiction.

Contact information for state radiation control program directors can be found at http://www.crcpd.org/

For further medical guidance, contact the Radiological Emergency Assistance Center/Training Site, or REAC/TS.

REAC/TS information can be found at http://www.orau.gov/reacts/

Additional medical guidance can be found at the Department of Homeland Security's Report on Medical Treatment of Radiological Casualties. The DHS treatment guidelines can be found at <a href="http://www1.va.gov/emshg/docs/Radiologic\_Medical\_Countermeasures\_051403.pdf">http://www1.va.gov/emshg/docs/Radiologic\_Medical\_Countermeasures\_051403.pdf</a>.

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national and international organizations.

**DEPARTMENT OF HEALTH AND HUMAN SERVICES**